

42-52. The Fichtelian species. Comparing the list of the Foraminifera figured in the *Tabl. Encyc. Méth.* with those catalogued and briefly described in the *Hist. Anim. s. Vert.* vol. vii., we find that Lamarck had considered and reconsidered their relations to each other and to the rest of the minute shells which he thought to be microscopic Cephalopods, and that consequently he had laboured to arrange them in a systematic form. That he failed in doing so is not to be wondered at, having no light as to their real relationships. Some of the terms applied by Lamarck to the Fichtelian species and varieties are serviceable, although his notions of the generic groupings were wrong. He did not advance beyond Fichtel and Moll in the definition of the species; indeed at first he retrograded in that respect, giving specific names to several *varieties* of *C. Cassis* in the *Tabl. Enc. Méth.* In publishing his *Hist. Anim. s. Vert.*, however, he appears to have recognized the propriety of giving wider limits to the specific groups.

63, 64, 65. Nothing need be said of *N. Fascia*, Linn., *N. Raphanistrum*, Linn., and *N. obliqua*, Linn., catalogued in the *Hist. An. s. Vert.* vol. vii. p. 594.

66. "*Nodosaria Siphunculus*" is a *Serpula*. See *Ann. Nat. Hist.* 3 ser. vol. iii. p. 480, where the Linnæan species and varieties of *Nodosaria* are treated of (pp. 477-479).

IX.—*Note on Carduella cyathiformis.* By Professor ALLMAN.

*To the Editors of the Annals and Magazine of Natural History.*

GENTLEMEN,

My attention has been directed to a communication "On the *Lucernaria cyathiformis* of Sars," by Mr. Gosse, in last month's Number of the 'Annals.' The following passage occurs in it: "In the 'Quarterly Journal of Microscopical Science' for this month, Professor Allman has described and figured what he considers to be the *Lucernaria cyathiformis* of Sars, instituting for it a new genus, under the name of *Carduella*. I feel sure he was not aware that I had already separated it from *Lucernaria*, under the generic name of *Depastrum*, in the 'Annals' for June 1858, p. 419."

The paragraph here referred to, in which Mr. Gosse institutes his genus *Depastrum*, occurs in his excellent "Synopsis of the British Actinæ;" and I confess that it had entirely escaped my memory, until the remark above quoted caused me again to refer to the paper which contains it. I find the genus *Depastrum* there defined as follows:—

"*Depastrum* (Gosse). Corpus repente contractum, et supra et

infra alvum. Tentaculorum fasciculi inter angulos disci positi, vix separati.”

The genus includes a single species, viz.—

“*D. cyathiforme* (Sars). Semipollicare. Brunneum.”

Now it is manifest that this definition will not at all apply to the *Carduella cyathiformis* of my paper in the ‘Microscopical Journal,’ nor to the *Lucernaria cyathiformis* of Sars, with which I consider *Carduella cyathiformis* to be identical.

The species on which Mr. Gosse founded his genus *Depastrum* is indeed an entirely different animal. It differs from *Carduella*, as Mr. Gosse now admits, in its octangular instead of circular disk; in the unequal length of the tentacles, and their clavate, rather than capitate, form; in the fasciculate grouping of the tentacles, and their arrangement in two or three rows, one within the other, instead of their disposal in a single circle; in their origin from the margin, instead of the surface, of the disk; as well as in other particulars of less importance.

It is plain, then, that, in Mr. Gosse’s “Synopsis,” the *Lucernaria cyathiformis* of Sars remains unaffected, though it is there cited as a synonym of *Depastrum cyathiforme*.

But another question here arises: may a generic diagnosis be so framed as to embrace within it the two species? Mr. Gosse is of opinion that it may, and he now proposes a generalization of his original diagnosis of *Depastrum*, so as, by the omission of certain characters, to enable it to embrace the genus *Carduella*, which he would accordingly suppress. The following is his amended diagnosis:—

“Corpus repente contractum, et supra et infra alvum.”

Upon this point, however, I must entirely differ from Mr. Gosse; for, in thus amending his original diagnosis, the characters he omits, as of only specific value, are assuredly of a higher order than those which he retains as generic. Indeed, the genus *Depastrum*, as thus defined, would differ from *Lucernaria* far less than from *Carduella*.

Mr. Gosse reminds us that M. Milne-Edwards, in the third vol. of his ‘Histoire Naturelle des Coralliaires,’ just published (1860), gives the generic name of *Calicinaria* to the *Lucernaria cyathiformis* of Sars. I must nevertheless claim priority for *Carduella*, the genus having been so named by me at the Aberdeen meeting of the British Association in September 1859. (See Reports of the British Association for that year.)

I am therefore not prepared to abandon the name of *Carduella*, or to cancel the diagnosis I have proposed for the genus. *Depastrum*, as defined in Mr. Gosse’s “Synopsis,” is also un-

doubtedly a good genus, though it is a mistake to cite the *Lucernaria cyathiformis* of Sars as representing it.

I remain, Gentlemen,

Very faithfully yours,

Edinburgh, June 1860.

GEO. J. ALLMAN.

X.—*Description of a new Helix; and Notice of the Occurrence of Planorbis glaber, Jeffr., in Madeira.* By R. T. LOWE, M.A.

[With a Plate.]

DURING an excursion in the north of Madeira, a few weeks past, I had the good fortune to discover the following fine and entirely new *Helix*, living at an elevation of about 4000 feet, on a dry and partially wooded mountain-slope or bank, along the new Levada now constructing in the Ribêiro do Fayal. Its affinity is primarily, doubtless, with the rare Desertan fossil, *H. coronula*, Lowe; and next, though more remotely, with *H. tiarella*, Webb, and with the recent Porto-Santan *H. coronata*, Desh. Yet it exhibits also, both in size and certain peculiarities of form and sculpture, the nearest approach yet discovered amongst living Madeiran Helices to the strange and curious *H. Delphinula*, Lowe, known at present only as one of the most abundant Caniçal fossils of Madeira.

The discovery of so fine a recent species ought to stimulate afresh the researches of naturalists in the higher sylvan regions of the island, considering how remarkable it is that so large and striking a shell as this, however rare and local it may be, should have hitherto escaped all observation.

The main points of interest attaching to *H. delphinuloides*, independently of its great rarity and beauty, are—1st, its supplying in some sort a link between the two remarkable Madeiran groups Craspedaria and Coronaria, in size agreeing better with the single known representative of the former, *H. Delphinula*, than with any previously described member of Coronaria; and 2ndly, its offering a living analogue, in the group Coronaria, to the fossil type, and indeed sole representative, of Craspedaria. The abundance, moreover, of *H. Delphinula* in a fossil state, and its apparent extinction as a living species, are curious facts when contrasted with the extreme rarity of its recent representative, *H. delphinuloides*, and the absolute non-occurrence of the latter as a fossil. But since the possibility of the one being a mere modification of the other is entirely inadmissible, the discovery of *H. delphinuloides* doubtless strengthens much the probability of the existence also in a living state of the true *H. Delphinula* itself in some of the many still unexplored sylvan nooks and